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EXAMINER	
DUONG, OANH L	

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/083,876	RIORDAN, KENNETH	
	Examiner	Art Unit	
	Oanh Duong	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 2, 4-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06/15/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 3, and 18-19 have been cancelled.

Claims 1, 2, 4-17 are presented for examination.

Claim Objections

2. Claims 2, 4-8, 10, 16, and 17 are objected to because of the following informalities: a transitional phrase (i.e., "further comprising") should be included Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 are rejected under 35 U.S.C. 102(b) as being anticipated by Metz et al. (hereafter, Metz), US 5,978,855.

Regarding claim 1, **Metz** teaches a network software downloading method *(i.e., method for downloading software through a network, col. 5 lines 14-17)*, comprising:

communicating terminal unique information *(i.e., download initiation)* for downloading of common software content *(i.e., software)* from the network to a plurality

of terminals *(i.e., terminals 100, Fig. 1)* in the network on corresponding dedicated communication channels (*i.e., two-way narrowband data communication network 16, Fig. 1)* for each terminal *(i.e., col. 8 lines 19-30, col. 11 lines 11-27 and col. 19 line 64- col. 20 line 35);*

sending a message to the plurality of terminals on corresponding dedicated communication channels to receive the common software content on a shared channel *(i.e., the network 16 provides two-way narrowband data communication between the terminals 100 and text server 16. The text server 18 transmits an instruction/message to the terminals 100 to select a channel carrying the software, col. 8 lines 19-30 and col. 19 line 64- col. 20 line 35);*

transmitting the common software content from the network to the plurality of terminals on the shared communication channel (i.e., broadcast channel) after sending the message *(Fig. 1 col. 8 lines 19-60 and col. 11. lines 7-32: Metz discloses application files are downloaded/transmitted from software server 12 to terminal(s) 100 via a broadcast channel).*

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metz in view of Brassil et al. (hereafter, Brassil), US 2002/0187776 A1.

Regarding claim 2, Metz teaches the method of claim 1,

receiving a request for the common software from a plurality of terminals on corresponding dedicated communication channel for each terminal (*i.e., terminal(s) 100 transmit(s) the input through the data channel (i.e., dedicated communication channel) to the text server 18, Fig. 1 col. 20 lines 23-25),*

transmitting the common software content from the network to the plurality of terminals making the request on the shared communication channel after receiving the request *(i.e., the software server 12 transmits selected information through the broadcast channel, col. 20 lines 30-35*);

Metz does not explicitly teach receiving confirmation from each of the plurality of terminals that received the software content on corresponding dedicated communication channels for each terminal after transmitting.

Brassil teaches teach receiving confirmation from each of the plurality of terminals that received the software content on corresponding dedicated communication channels for each terminal after transmitting *(i.e., confirmation that the download has been completed is received by the service provider, pages 2-3 paragraph [0034).*

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Metz to receive confirmation from each of the plurality of terminals that received the software content for each terminal after

transmitting as taught by Brassil. One would be motivated to do so to enable user's account to be credited once confirmation the download has been completed is received (Brassil, page 2 paragraph [0034], lines 4-7).

Regarding claim 4, Metz-Brassil teaches the method of claim 1, receiving confirmation from each of the plurality of terminals that received the common software content on corresponding dedicated communication channels for each terminal after transmitting *(i.e., Brassil, confirmation should be sent over the slow speed network, page 3 paragraph [0034] line 1-4).*

7. Claims 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metz, in view of Wiehler, US 6,850,915 B1.

Regarding claim 5, Metz teaches the method of claim 1,

transmitting/exchange data message relating to an interactive service from the network to a plurality of terminals over corresponding dedicated channels for each terminal (i.e., provide two-way, low-speed data communications capacity, e.g., for signaling and/or interactive text service between text server 12 and terminal(s) 100, Fig. 1, col. 5 lines 18-21);

transmitting the common software content from the network to the plurality of terminals on the shared communication channel after exchanging data message *(Fig. 1 col. 8 lines 19-60 and col. 11. lines 7-32: Metz discloses application files are*

downloaded/transmitted from software server 12 to terminal(s) 100 via a broadcast channel).

Metz does not explicitly teach transmitting data message such as a digital signature from the network to terminal.

Wiehler teaches providing/transmittng a digital signature from the network to (col. 5 line 34- 61).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of **Metz** to provide digital signature to terminal before software downloading as taught by **Wiehler. One would be motivate to do so** to enhance the security of the system (Wiehler, col. 6 lines 17-19).

8. Claim 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metz in view of Yong et al. (hereafter, Yong), US 5,541,919.

Regarding claim 6, Metz teaches the method of claim 1, further comprising

multiplexing a plurality of different software content on the shared communication channel (col. 11 line 1-9).

Metz does not explicitly teach dynamically adjusting the plurality of different common software content multiplexed on the shared communication channel.

Yong teaches system and device wherein multiplexing and sending the packets to a shared communication link are provided (seen in abstract). Yong teaches dynamically adjust content multiplexed on the shard communication channel (col. 2 line 48-col. 3 line 36).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Metz to dynamically adjust content multiplexed on the shared communication channel as taught by Young. One would be motivated to do so to achieve efficient bandwidth sharing (Yong, col. 4 lines 12-13).

Regarding claim 8, Metz-Yong teaches the method of claim 6, dynamically adjusting the plurality of different common software content based on a priority factor (Young, col. 3 lines 27-37).

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Metz in view of Yong et al. (hereafter, Yong), US 5,541,919, and further in view of Levitan, Us 6,965,913 B2.

Regarding claim 7, **Metz** teaches the method of claim 6.

the combination of teachings of **Metz and Yong** does not teach dynamically adjust the plurality of different common software content in proportion to a changing number of the plurality of terminals receiving the plurality of different common software content.

Levitan teaches system wherein content delivery in broadcast radio is provided (see abstract). **Levitan** teaches a periodical transmission of each requested file is proportional to a number of clients requested the file (col. 7 lines 8-20).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of the combination of teachings of **Metz**

and Yong to include a periodical transmission of each requested file is proportional to a number of clients requested the file as taught by **Levitan** because it would overcome both slow downloading and traffic jams (**Levitan**, col. 2 line 57-58).

10. Claims 9-11, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tanaka** et al. (hereafter, Tanaka), U.S. Patent No. **6,671,509** B1 in view of Yong et al. (hereafter, Yong), US 5,541,919.

Regarding claim 9, **Tanaka** teaches a radio communication network software loading method *(i.e., transmitting/downloading software from base station to mobile communication unit(s) via a radio link, Fig. 1 col. 2 lines 22-39 and col. 12 lines 15-28),* comprising:

transmitting software content from a radio communication network to a plurality of terminals in the network by multiplexing the software content on a shared communication channel (broadcast channel) received by the plurality of terminals *(col. 3 lines 47-51, col. 4 lines 48-58, col. 8 lines 11-61, and col. 12 lines 14-28: Tanaka discloses software is transmitted from base station to mobile station(s) via radio link based on a time-division multiplex transmission scheme using a broadcast channel);* and

Tanaka does not explicitly teach dynamically adjusting the software content multiplexed on the shard communication channel.

Yong teaches system and device wherein multiplexing and sending the packets to a shared communication link are provided (seen in abstract). Yong teaches dynamically adjust content multiplexed on the shard communication channel (col. 2 line 48-col. 3 line 36).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Metz to dynamically adjust content multiplexed on the shared communication channel as taught by Young. One would be motivated to do so to achieve efficient bandwidth sharing (Yong, col. 4 lines 12-13).

Regarding claim 10, **Tanaka** teaches the method of claim 9, wherein software content is multiplexed on the shared channel from a radio device management server (base station) in communication with the radio communication network *(i.e., the system software item may be divided and then transmitted from base station to mobile station(s) via radio channels, col. 6 lines 5-10 and col. 15 lines 58-67).*

Tanaka does not explicitly teach dynamically adjusting the software content multiplexed on the shard communication channel.

Yong teaches system and device wherein multiplexing and sending the packets to a shared communication link are provided (seen in abstract). Yong teaches dynamically adjust content multiplexed on the shard communication channel (col. 2 line 48-col. 3 line 36).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Metz to dynamically adjust content

multiplexed on the shared communication channel as taught by Young. One would be motivated to do so to achieve efficient bandwidth sharing (Yong, col. 4 lines 12-13).

Regarding claims 11, Tanaka-Yong teaches the method of claim 9, the software content comprises a plurality of different software files, dynamically adjusting the software content multiplexed on the shared communication channel by adjusting a transmission time of each of the plurality of software files (Yong, col. 5 lines 7-32).

Regarding claim 15, **Tanaka-Yong** teaches the method of claim 9, the software content comprises a plurality of software files (Tanaka, *a plurality of system software items, col. 3 lines 49-51),* dynamically adjusting the content multiplexed in the shared communication channel based on at least one of file size and a number of the plurality of terminals receiving the software files (Yong, col. 3 lines 27-59).

Regarding claim 17, TanaKa-Yong teaches the method of claim 9, fragmenting the software multiplexed on the shared channel by packetizing the software content (Yong, col. 3 lines 2-33).

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Tanaka** et al. (hereafter, Tanaka), U.S. Patent No. **6,671,509** B1 in view of Yong et al. (hereafter, Yong), US 5,541,919, and further in view of Hayato, US 6,081,692.

Regarding claim 12, Tanaka teaches the method of claim 9, the software content comprises a plurality of different software files *(i.e., a plurality of system software items, col. 3 lines 49-51).*

Tanaka does not explicitly teach dynamically adjusting the software content multiplexed on the shard communication channel by adjusting the number of times each of the plurality of files is transmitted.

Yong teaches system and device wherein multiplexing and sending the packets to a shared communication link are provided (seen in abstract). Yong teaches dynamically adjust content multiplexed on the shard communication channel (col. 2 line 48-col. 3 line 36).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Metz to dynamically adjust content multiplexed on the shared communication channel as taught by Young. One would be motivated to do so to achieve efficient bandwidth sharing (Yong, col. 4 lines 12-13).

Hayato teaches adjusting the number of time signal is transmitted (seen in abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Tanaka to adjust the number of times signal is transmitted as taught by Hayato. One would be motivated to do so to improve the reliability of reception (Hayato, co. 6 line 4-6).

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Tanaka,** in view of **Yong,** and further in view of **Jennings** et al. (hereafter, Jennings), U.S. Pub. No. **2002/0099842** A1.

Regarding claim 13, **Tanaka** teaches the method of claim 13, the software content comprises a plurality of software files *(i.e., a plurality of system software items, col. 3 lines 49-51)*, dynamically adjusting the software content multiplexed on the shared communication channel *(i.e., the system software item may be divided /adjusted and then transmitted, col. 15 lines 58-67).*

Tanaka does not explicitly teach priory the transmission of software files that generates greater amounts of revenue relative to the transmission of software files that generate lesser amounts of revenue.

Yong teaches information bitstreams are prioritized and multiplexed for efficient transmission (col. 2 lines 48-52). One would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of Tanaka to prioritize the information bitstreams as taught by Yong. One would be motivated to do so to provide efficient transmission over the network (Yong, col. 2 line 52).

Jennings teaches content that generate more revenue receives priority during processing (page 24 paragraph [0300]). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teachings of **Tanaka** to designate the content/file that generate more revenue to receive priority during the processing as taught by **Jennings** because it would allow the system, such as in Tanaka, to provide a high quality service to the user who costs more.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Tanaka,** in view of **Yong,** and further in view of **Park** et al. (hereafter, Park), U.S. Patent No. **6,744,738** B1.

Regarding claim 14, **Tanaka** teaches method of claim 9, the software content comprises a plurality of software files *(i.e., a plurality of system software items, col. 3 lines 49-51)*, dynamically adjusting the software content multiplexed on the shared communication channel *(i.e., the system software item may be divided /adjusted and then transmitted, col. 15 lines 58-67).*

The combination of Tanaka and Yong does not explicitly teach prioritizing the transmission of more essential software files over the transmission of less essential software files.

Park teaches the wireless transmission system wherein a data transmission determiner for determining the transmission priority is provided (see abstract). Part teaches prioritizing the transmission of more essential data over the transmission of less essential data (col. 3 lines 7-42).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination of teachings of **Tanaka and Yong** to prioritize the transmission of more essential data over the transmission of less essential data as taught by **Park**. One would be motivated to do so to allow data to be transmitted faster than the conventionally technology when the bandwidth of the allowed channel is

small and the amount of data to be transmitted per unit time is large (**Park**, col. 4 line 33-38).

14. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Tanaka** et al. (herein, Tanaka), U.S. Patent No. **6,671,509** B1, in view of Yong, and further in view of **Hamabe**, U.S. Pub. No. **2002/0115467** A1.

Regarding claim 16, **Tanaka** teaches the method of claim 9, receiving confirmation from each of the plurality of terminals that received the software content for each of terminal after transmitting (*i.e., the base station receives download completion notice from the mobile station(s), col. 6 lines 5-10 and col. 7 lines 46-61).*

The combination of teachings of **Tanaka and Yong** does not explicitly teach receiving confirmation on corresponding dedicated channel.

Hamabe teaches receiving confirmation on corresponding dedicated channel after transmitting (i.e., when sending of data is completed, the mobile station uses the DPCH/dedicated channel to notify base station of end of data reception, page 7 paragraph [0077]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combination of teachings of **Tanaka and Yong** to transfer confirmation via dedicated channel from mobile station as taught by **Hamabe**. One would be motivated to do so to prevent an increase in interference wave power resulting from an increase in transmission power of the dedicated channel to increase

line capacity while increasing reliability of control information for carrying out high peed data communication from base station to mobile station(s) (**Hamabe**, page 4 paragraph [0027]).

Response to Arguments

15. Applicant's arguments with respect to claims 16, 9, 10 11, 12, 14, and 15 have been considered but are moot in view of the new ground(s) of rejection.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh Duong whose telephone number is (571) 272-3983. The examiner can normally be reached on Monday- Friday, 9:30PM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

o.d
December 10, 2006